

FIG. 1

CATAAATCAGCAGCAGCTACTAACACTCAAGCAATGCTTCAGGTTGGAACTAATACCTCAGAGGCAGC
TGGTGTGAACATGCAAACACGGATTACGCTCCAGTGGCACAGCAGCCACTAGGAAATTTATTTGAAAAG
ACCTGACTGAATGCCTCAGGCTAAAGTTAAGGTGAAGGAGGACAGAAAGCAAGAGCAGACTCTTT
CAACTGAGAATGATATTTCAGAAAGCCTAAGATTTACAAATGAAGGTGATCAGAGCCGTTCTGGGAGACA
GTAAAACTCCATTTCAGCCTGGGAGCACGTGACATTTACTCACAAACAGGCATGCCAATTTACGCTCAN
AACTTTCGGCAGACAAAGGCGTGGAGAAACACTGAGGCTACCTGACCCGAGAGATCGAATCAATTCC
GAGGGATCTGAATCCACTGGTGCAGGATGAATCCACTCATCACCATGGAATGCACACTTCTCTCCACTT
CTGGAACCGCAGCACCTACGGACCGCACAGCAATGCCAGTGAGTCCCTTGGAAAGGCTACTCTGATGGA
GGGTGTTATGAGCAACTTTTGTCTCCCTGAGGTGTTGTGACTCTGGGTGTCATCAGCTTGTGGAGAAAT
ATTCTGGTGATTGTGGCAATAGCCAAGAACAAACCTGCATTCGCCCATGTACTTTTTCATCTGCAGCCTG
GCTGTGGCTGATATGTTGTGAGCGTGTCAACGGATCCGAAACCATTTGTATCACCTATTAAACAGTACA
GATACGGACGCGCAGAGTTTACCGTGAATATTGATAATGTCAATGACTCGGTGATCTGTAGCTCCTTGCTT
GCATCGATTTCAGCCTGCTCTCAATTGCAGTGGACAGGTACTTTACTATCTTTTATGCTCTCCAGTACCAT
ACATCATGACGGTCAAGCGGGTTGGGATCATCAAGTTGTATCTGGGCAGCTTGCACGGTTTCGGGCGTTT
TGTTTCATCATCTACTCAGACAGAGTGTCTATCATCTGCTCATCACCATGTTCTTCCACCATGCTGGCTCT
CATGGCCTCTCTATGTCCACATGTTCTCATGGCCAGACTGCACATTAAGAGAAATGCTGTCTCCCGGG
CACTGGCACCATCCGCCAAGGGGCCAACATGAAGGGTGCAATTACCCCTGACCATACTGATTGGGGTCTTTG
TTGTCTGCTGGCCCGTTCTCTCCACTTAATATCTACATCTTTGTCCCCAGAAATCCTTACTGTGTGTG
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TGCTAGCAGATACTAATGTGCAGATAGAAACGTGCATAAGACTTCTTCATCTTACAGAACCCGGAACA
TTGTGCTTTGATGACCTTTTCTCTCTGTGTAAAGGCATGGGTTGAGACTATCTGTTGTATAAATTIAAGTTC
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CAATGTTAATCCATATTATAGGTTGTAGGCACATATGATATAAAATAAAAAA

CTAAGACCGTGGGAGGCAGCTGATGCCAACAATGTGCA CGCAGATT CAGCTCCTGTGGCTCGGCGGCAACTC
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TCATCACCATGTTCTTCAACCATGCTGGCCCTCATGGCTTCTCTCTACGTCCACATGTTCTCATGGCCAGACTGCA
CATCAAGAAATCGCCGTCCTCCCGGGCACCGGCACCATCCGCCAAGGGGCCAACATGAAGGTGCCATTACCT
TGACCATACTATTGGGTCTTCGTCTGTCTGCTGGGCTCCATTTCTCTCCACCTTGATAATTTACATCTCTGTGCC
CAGAAATCCATACTGTGTGCTTCATGTCTCACTTTAACTTGTAACCTCAATCTGTATCATGTGTAACTCCATCATCGA
CCCTCTCATTTATGCACCTCCGAGCCAGAGCTGAGGAAACCTTCAAAGAGATCATCTGTTGCTATCCTCTGGG
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TCATCCTCACACAACATGAAC TGTGTGTTGGACAACAGCTGCTTCTCAGTATAAGGCAGGAGTTTGAGAATATC
TGTTGCACA AATTCAACTTTATGATGTTTTGATGTGAAA AAAAATGCCCCAGGCTCTGTACATTGCTAATGTCTCAT
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TCCATTAAAGCATAATCAGTGTTCCTTGTATTTCACGAGGATTTGGCACTTTGCTTGTCTTAGGAAACATAGAAAAT
CATAGAATCATTAAC TATGTAGCCTGATAAGTAACTTCTTATATATACTATATCATATGAAATGTGCAGATTTGAAT
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TGTTGTTCAATCTCCCTGTTGCAGAAATAAAAAAAA

FIG. 3

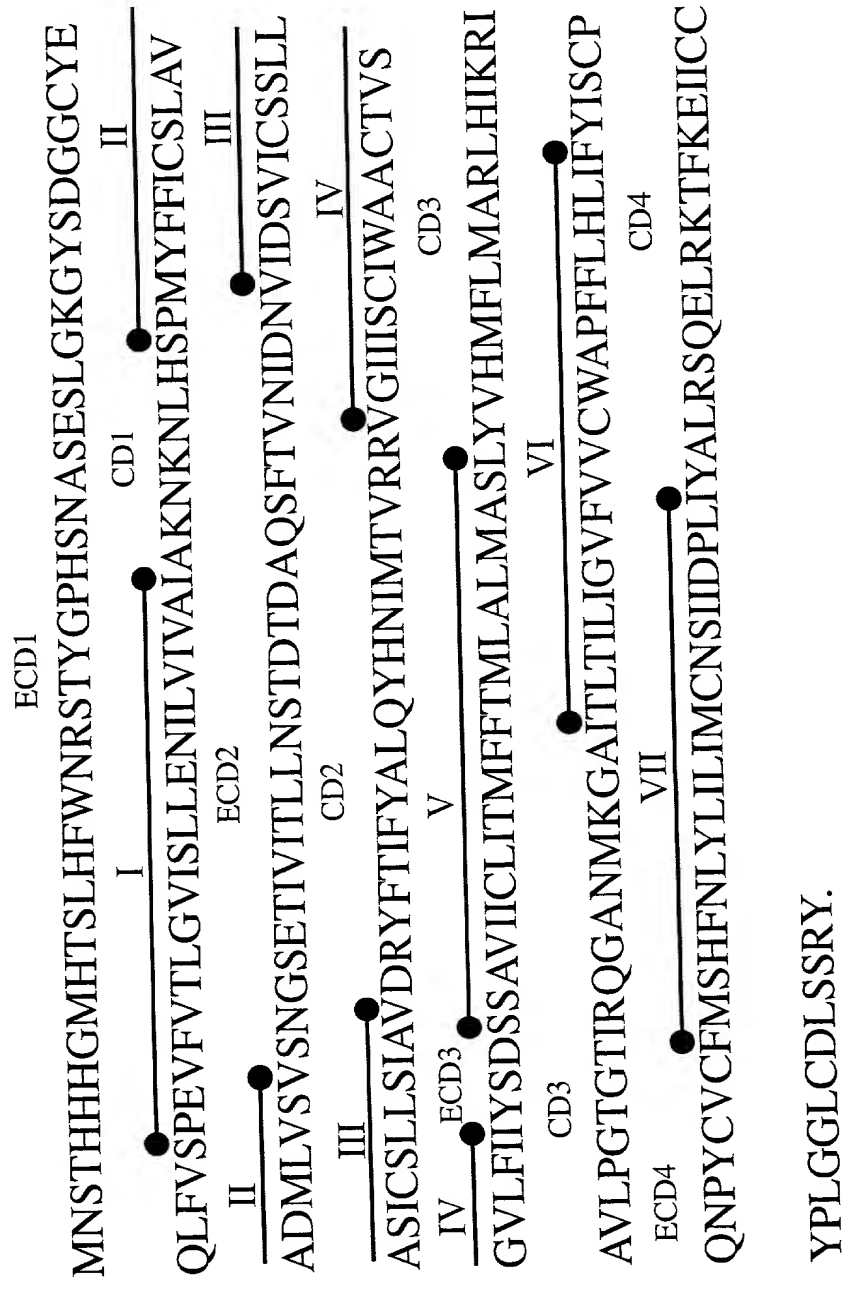
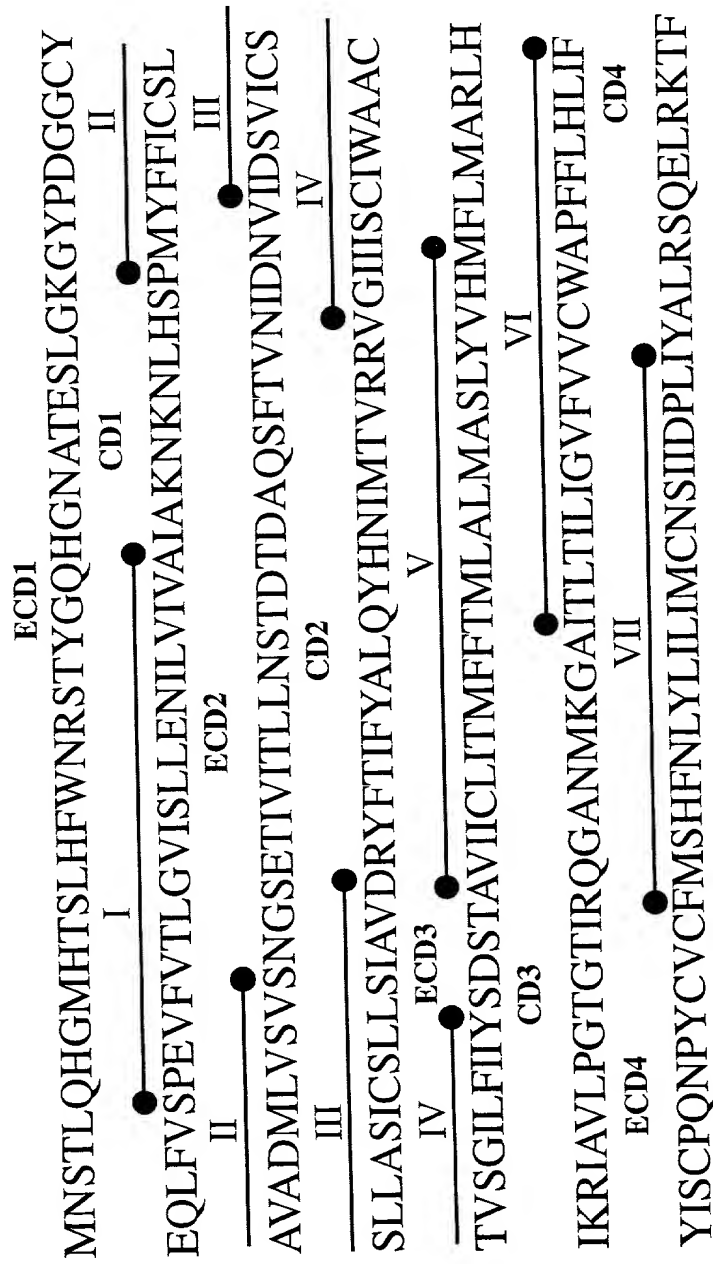


FIG. 4



KEIICCYPLGGLCDLSSRY.

FIG. 5

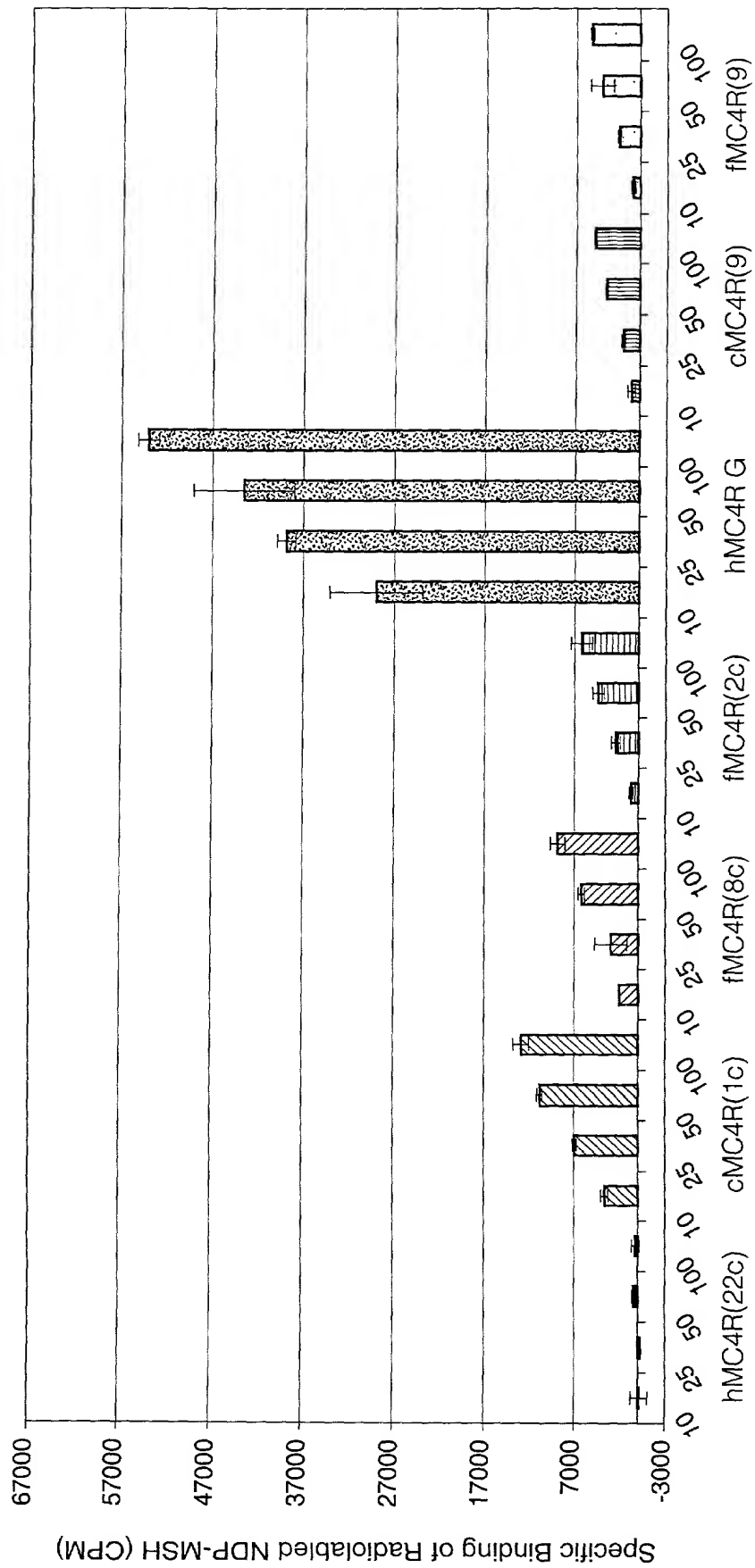


FIG. 6

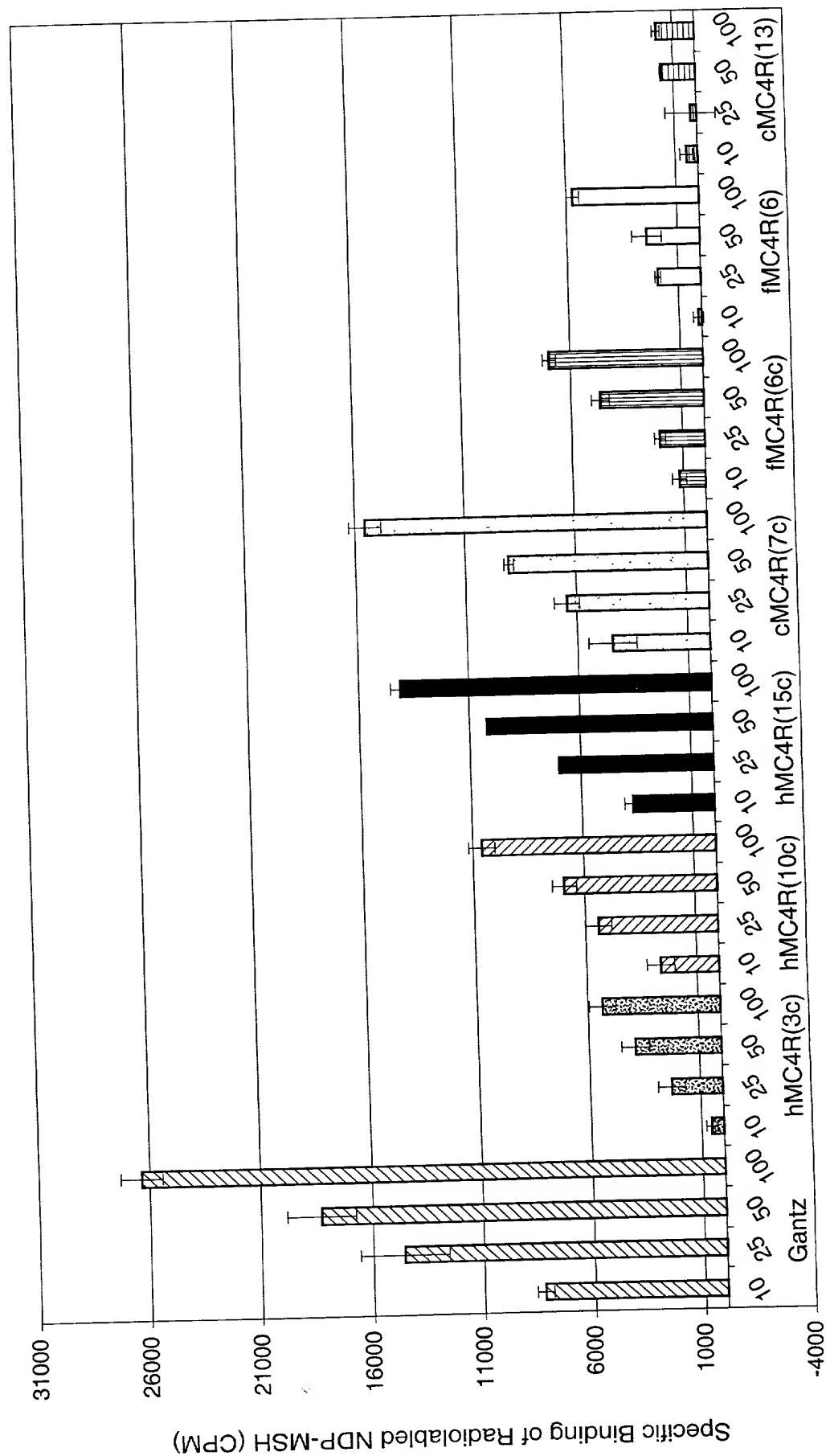


FIG. 7

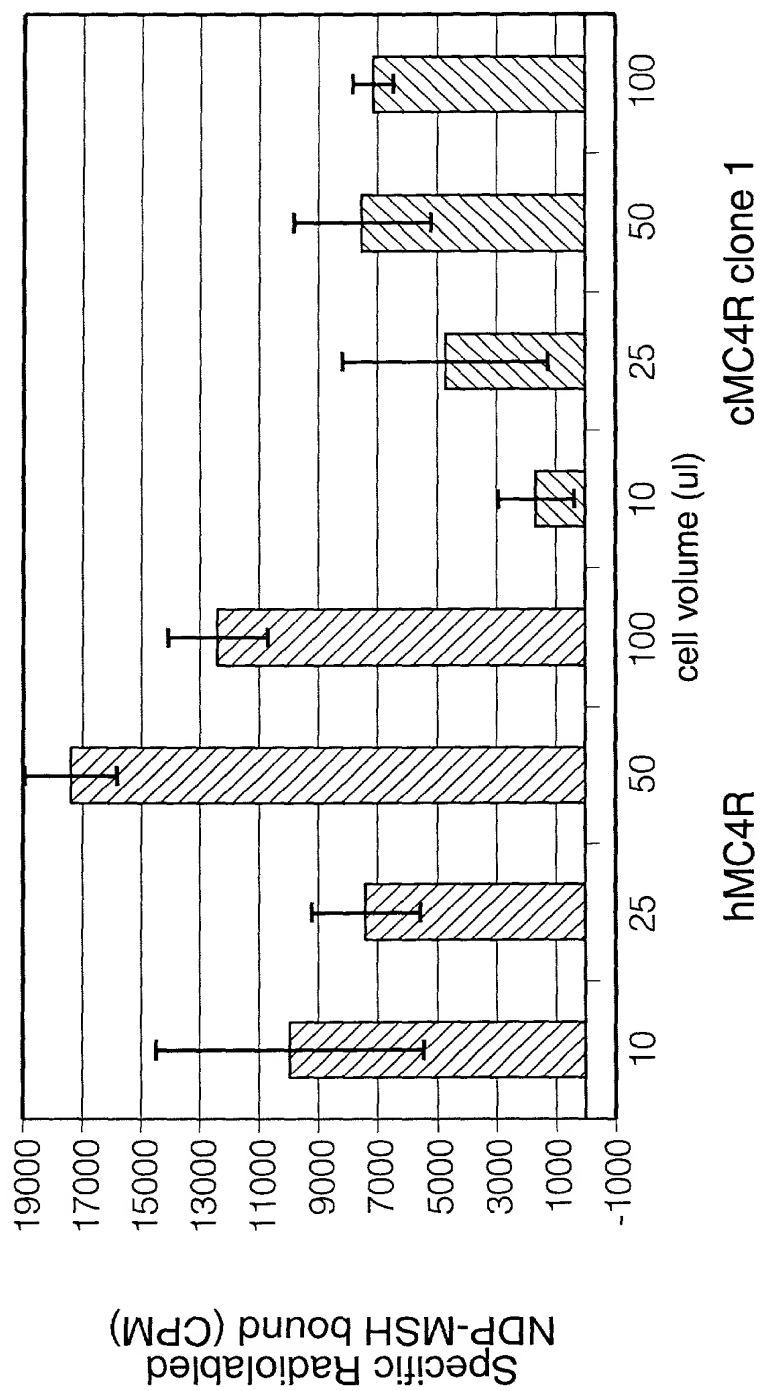
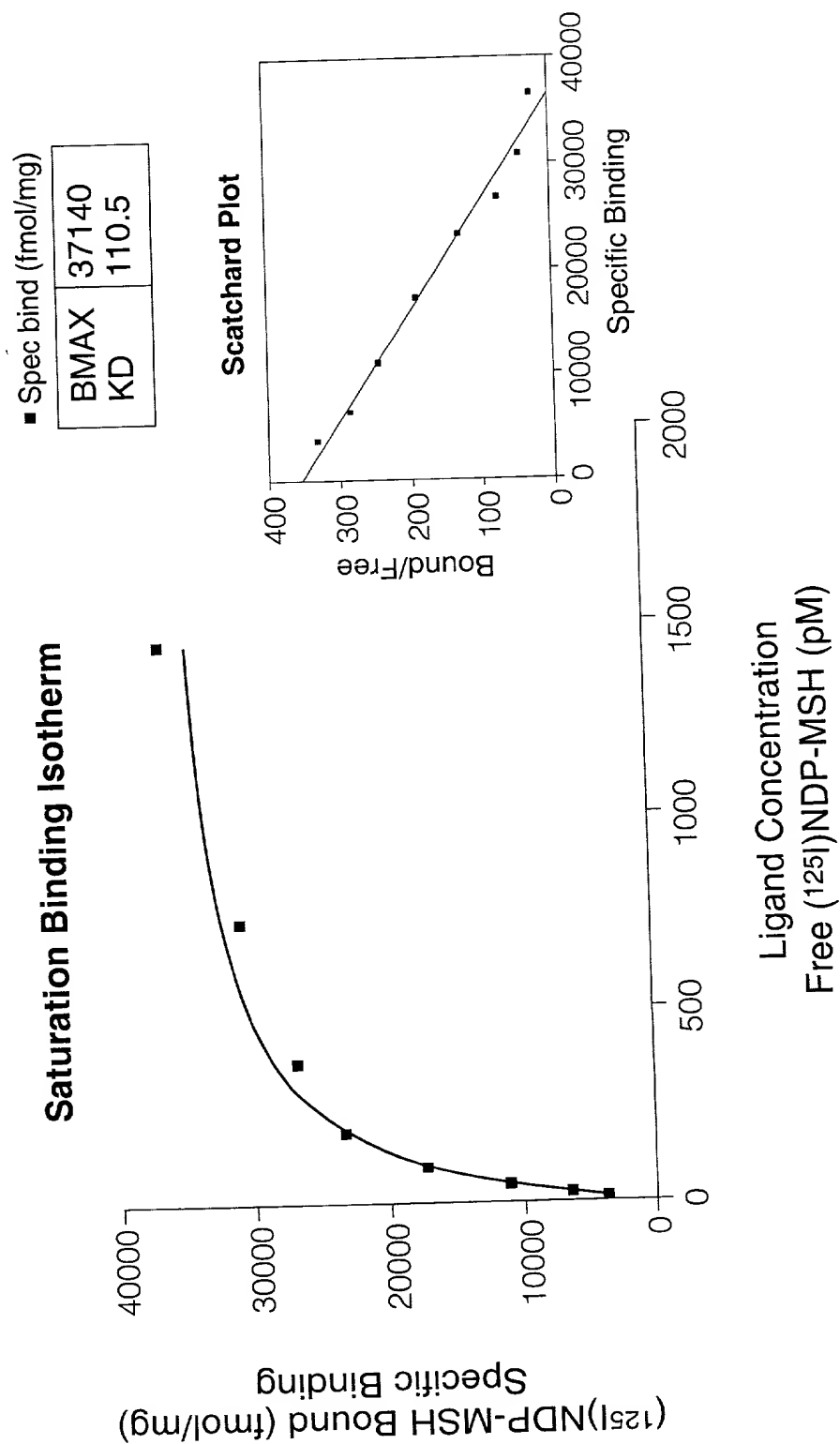


FIG. 8A



918

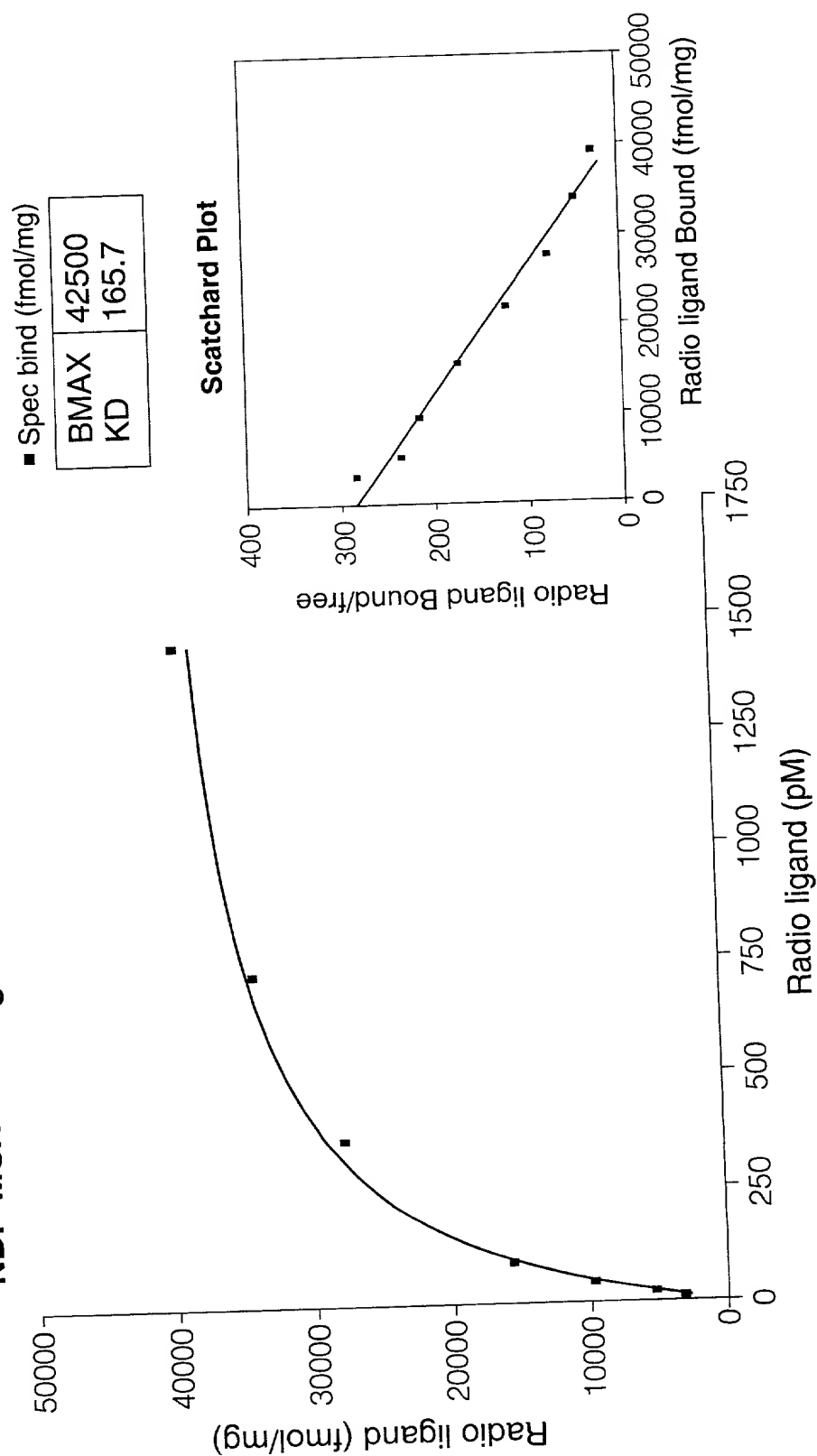


FIG. 8C

Saturation Binding Isotherm for Radiolabelled
NDP-MSH binding to cMC4R C1/293 membrane

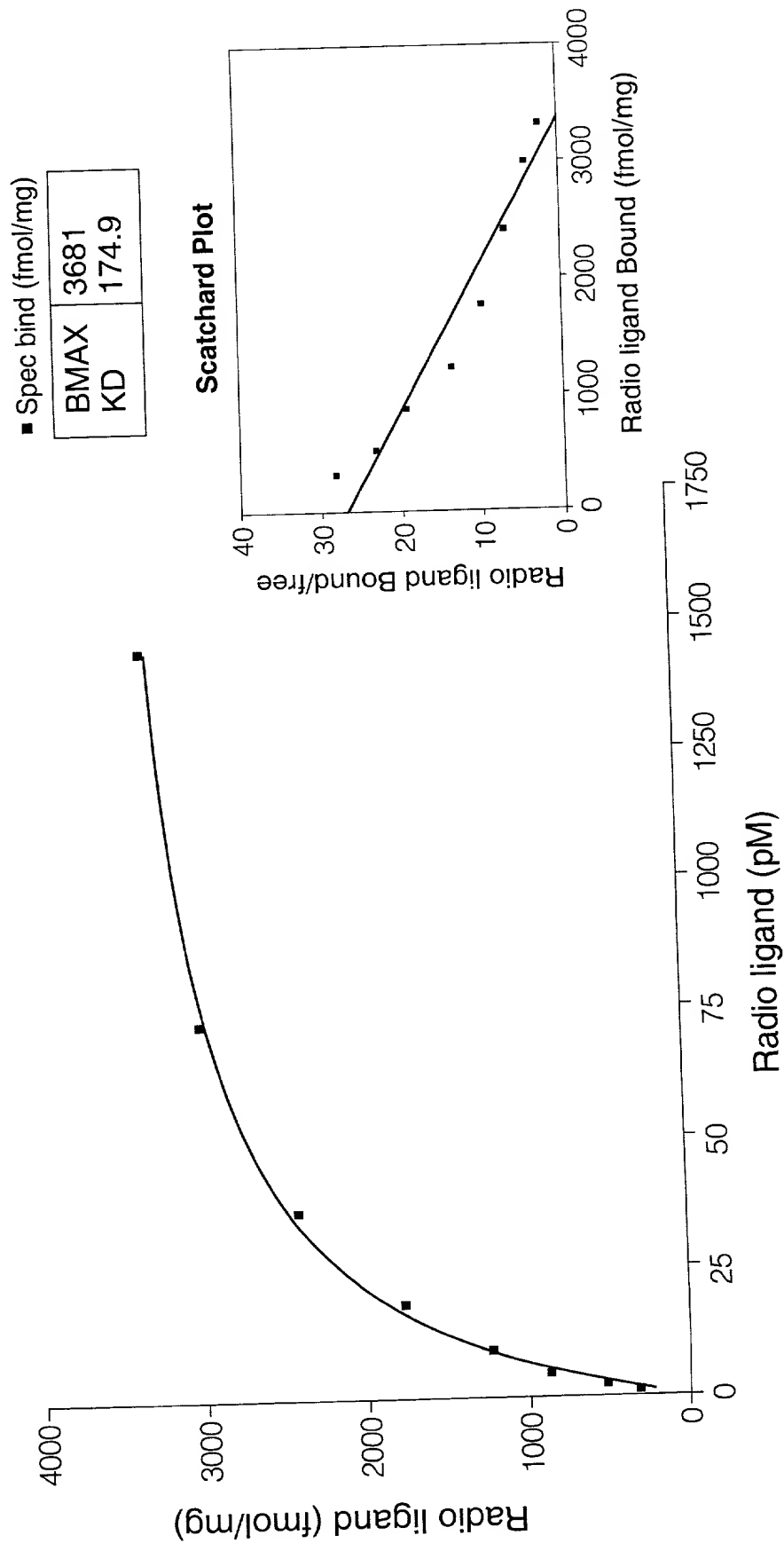


FIG. 9A

Membrane	IC50 (M)			Shu9119	JKC363
	ndp-MSH	MTII			
hMC4R	5.13E-10	3.95E-10		7.63E-11	1.31E-09
cMC4R	5.25E-10	4.01E-10		4.07E-11	9.71E-10
hMC3R	3.68E-10	2.48E-09		3.05E-10	1.51E-08

h=human
c=canine

FIG. 9B

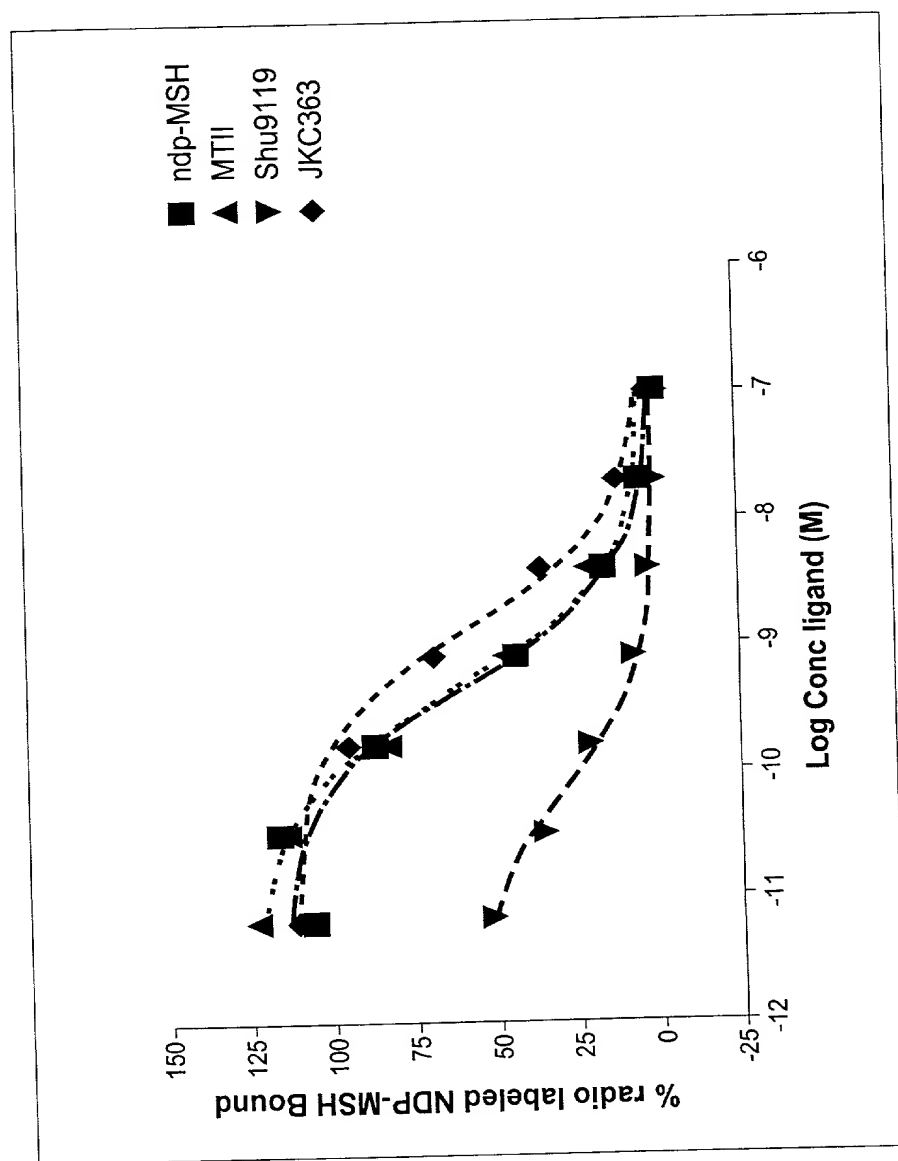


FIG. 9C

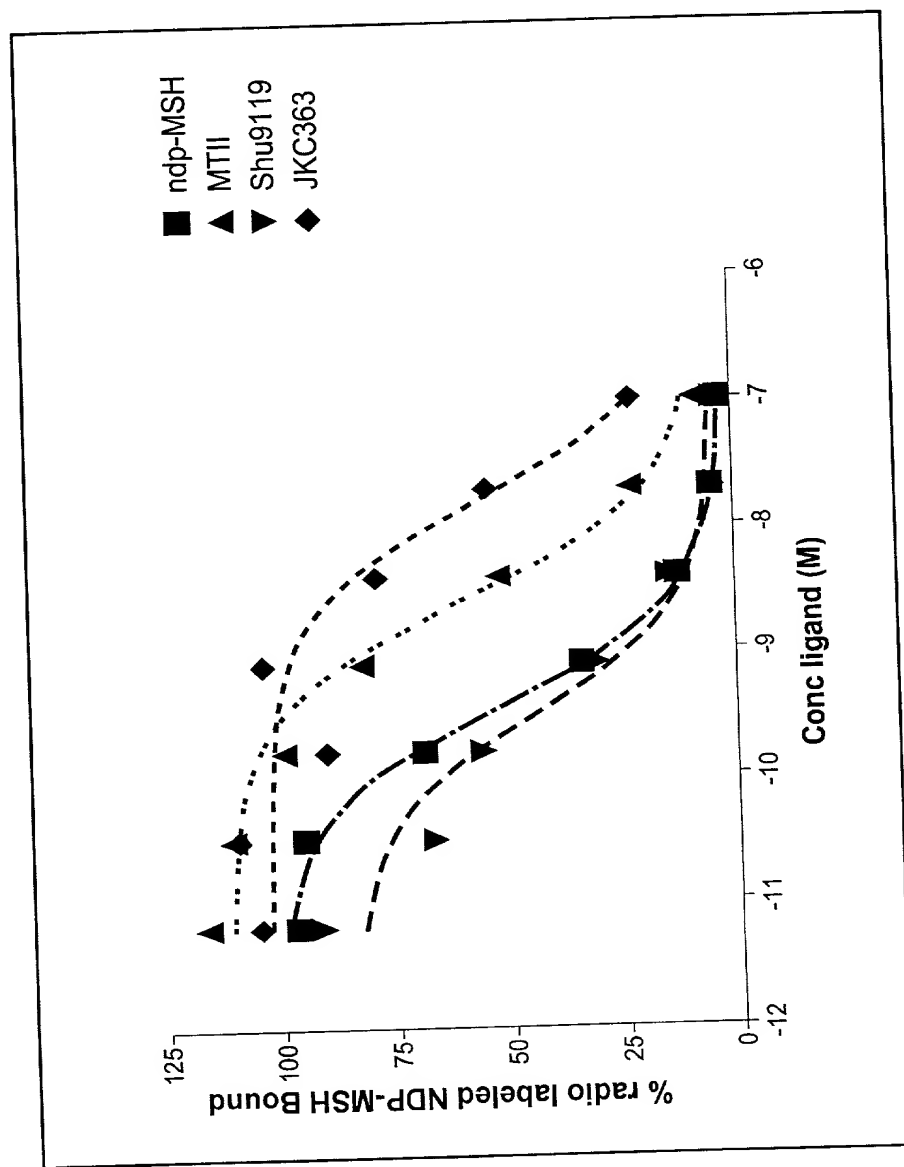


FIG. 9D

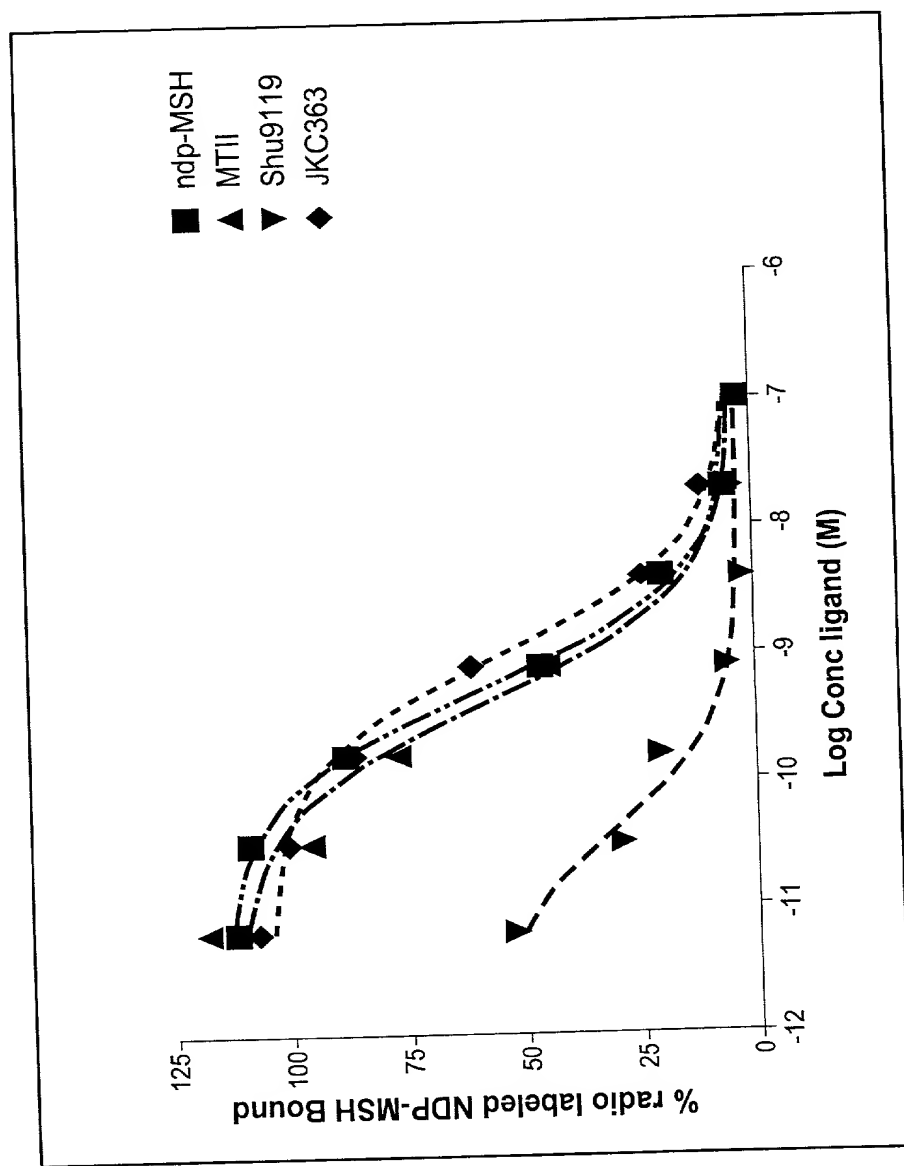


FIG. 10

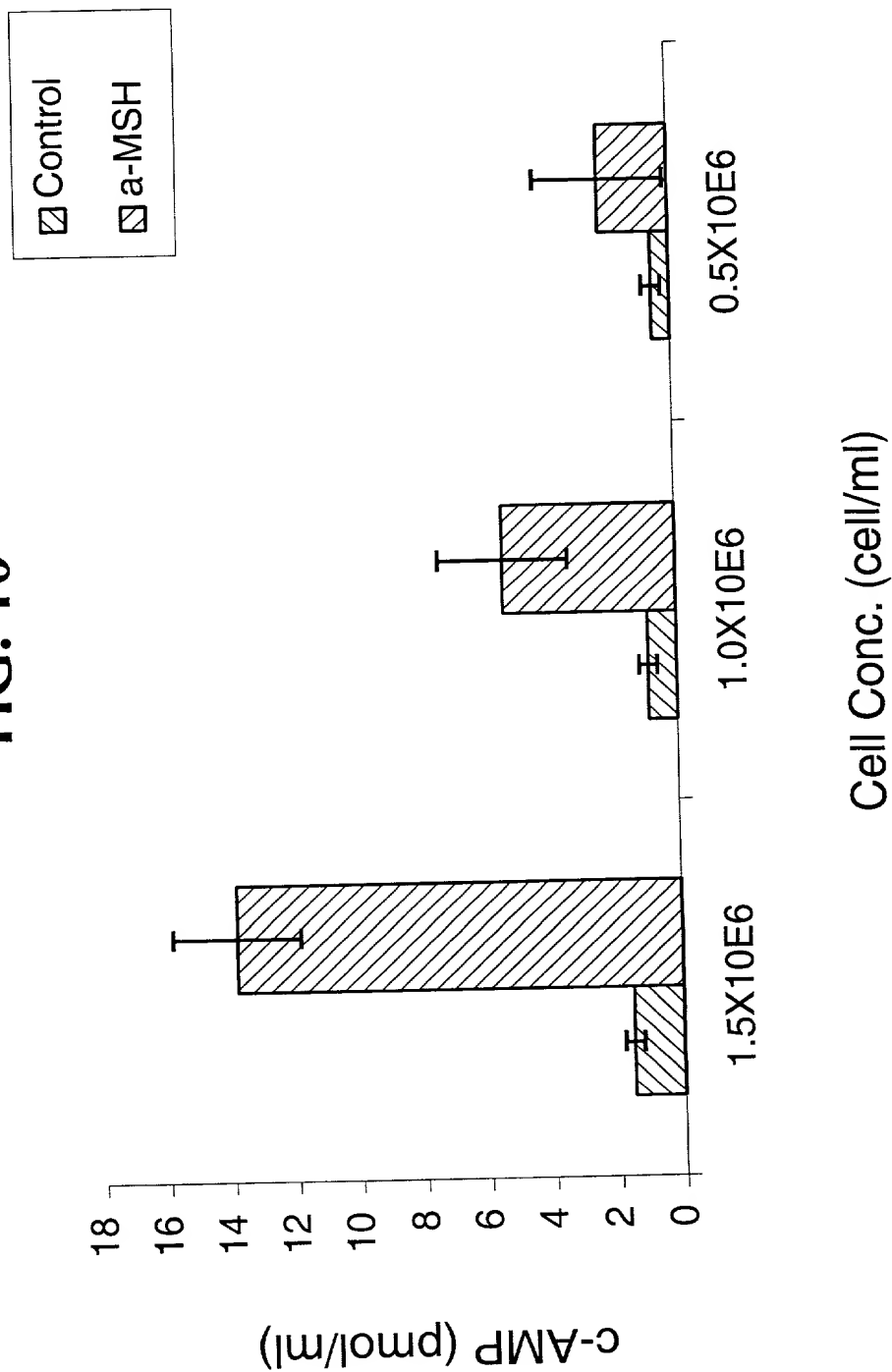


FIG. 11A

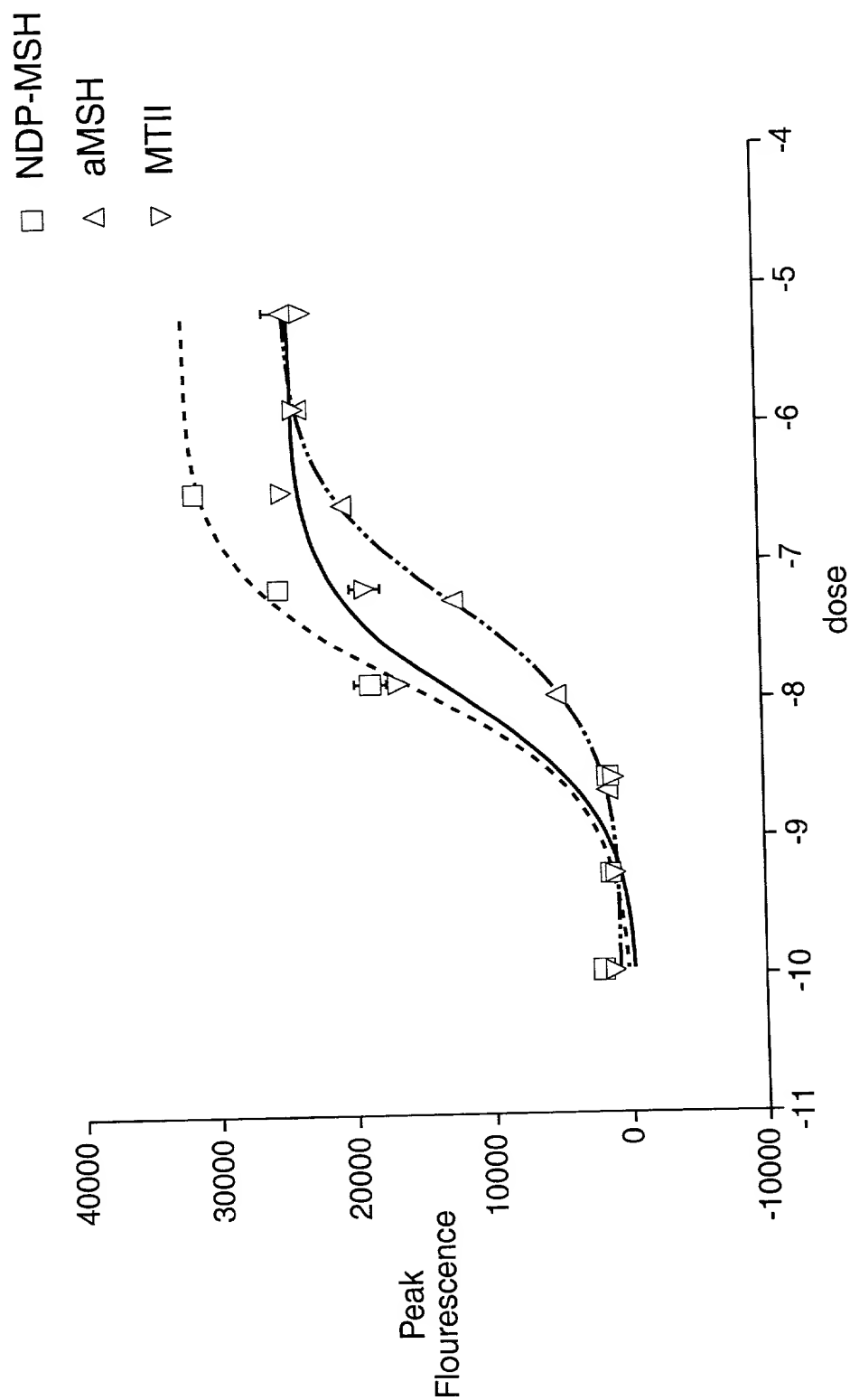


FIG. 11B

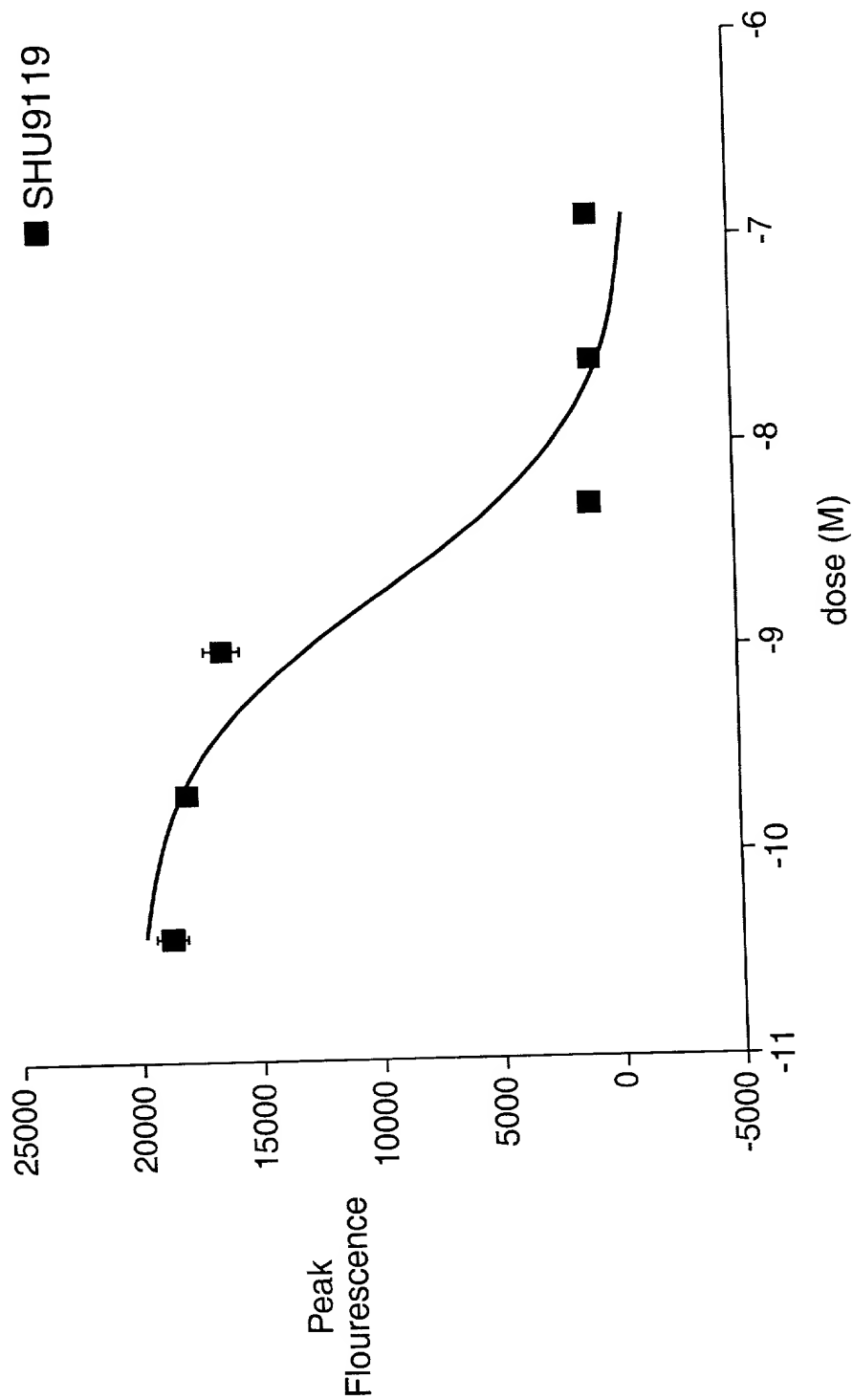




FIG. 12A

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ATATCCATCACACTGGCGGCCGCTCGAGCATGCATCTAGA

FIG. 12A



FIG. 12B

gggeccggttaaaccgctgatcagcctcgactgtgccttctagtgtccagccatctgtgtttgcccc
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FIG. 12C

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099441-064660



FIG. 13A

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CCCAGATCTAAAGCCGAATTCTGCAGATATCCATCACACTGGCGGCC
GCTCGAGCATGCATCTAGA

Top 1-1000



FIG. 13B

ctagagggcccggtttaaaccgctgatcagcctcgactgtgccttctagtgtccagccatctgttgttggccc
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FIG. 13B

FIG. 13C

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